

CLAIMS

I claim:

1. A geothermal loopless exchanger apparatus comprising:

a geothermal heat pump;

a pumping means attached to said geothermal heat pump;

a closed loop line conduit comprising a fluid inlet, a heat exchanger and a fluid outlet whereby the fluid inlet and the fluid outlet are attached to said geothermal heat pump and whereby the heat exchanger is situated such that the heat exchanger is inserted into a water source thereby creating a flooded state about the heat exchanger;

said heat exchanger comprising a fluid intake and a fluid return, said fluid intake being attached to the fluid outlet of the closed loop line conduit and said fluid return being attached to the fluid inlet of the closed loop line conduit;

a fluid flowing within said closed loop line conduit;

a contaminate monitor alarm and shut down switch attached to said fluid outlet of the closed loop line conduit whereby the contaminate monitor alarm and shut down switch would monitor the closed loop line conduit and shut down the apparatus if a leak of fluid is detected;

an insulated vault encasing said heat exchanger, said insulated vault having a locking cover thereby restricting access to the heat exchanger;

a first walled failure alarm attached to the fluid outlet and contained within the insulated vault whereby any failure in the apparatus within the insulated vault would be detected thereby allowing for the shutting down of the apparatus; and

a flow meter attached to the fluid inlet of the closed loop line conduit and further situated at a position on the fluid inlet that is relatively close to the geothermal heat pump to monitor the flow of the fluid within said closed loop line conduit, whereby the fluid is pumped through the closed loop line conduit by the pumping means, flowing through the heat exchanger to allow for the transfer of heat from the water supply into the fluid, the fluid then continuing to flow back through the closed loop line conduit to the geothermal heat pump to extract the transferred heat for use in a dwelling or other such type building.

2. The apparatus of claim 1 wherein the fluid is an ecologically safe coolant or refrigerant having a very low boiling point such that the fluid is in a gaseous state at room temperature.
3. The apparatus of claim 2 wherein the ecologically safe coolant or refrigerant is R22 or R410a.
4. The apparatus of claim 3 wherein the water source is a city water main.
5. The apparatus of claim 3 wherein the water source is provided by a solar energy heat source system
6. The apparatus of claim 3 wherein the water source is any flooded or forced water source, such as a natural spring, well or river.